

Application No. 10/709,138  
Amendment dated October 22, 2007  
Reply to Office Action of July 20, 2007

4

Docket No.: 80300(302750)

### **REMARKS**

Claims 1, 3, 4, 7 and 10 are pending in this application, all of which have been amended. Claims 9 and 11 have been canceled. No new claims have been added.

The Examiner has objected to claims 3, 4, 7, 9 and 10 for various informalities which have been corrected in the aforementioned amendments.

Claims 1, 3, 4, 7 and 9-11 stand rejected under 35 U.S.C. §112, first paragraph, for failing to comply with the written description requirement.

In particular, the Examiner has not found support in the specification for the claimed negative limitation of omitting formation of a solder resist pattern, as recited in claim 1.

Applicant respectfully disagrees. Paragraph [0005] of the specification discusses a short circuit problem in the prior art in which solder resist is not formed where the pitch between electrodes is 60  $\mu\text{m}$  or less. The present inventor addresses this problem by selectively applying an oxidizing agent in the space portion between electrodes where the distance between electrodes is smaller than 30  $\mu\text{m}$ .

Thus, Applicant respectfully submits that the specification does provide support for the claimed negative limitation of omitting the formation of solder resist.

Claims 1, 3, 4, 7 and 9-11 stand rejected under 35 U.S.C. §112, second paragraph, as indefinite.

Accordingly, claim 1 has been amended to correct the noted instance of indefiniteness by clarifying that the oxidizing agent is selectively coated in the space portions in which the distance between the electrodes is smaller than 30  $\mu\text{m}$ .

This phrase corresponds to minimum line width of solder resist when the solder resist is patterned. Instead of patterning of solder resist, the present invention is applied so as to prevent an electrical short circuit between electrodes.

Thus, the 35 U.S.C. §112, second paragraph, rejection should be withdrawn.

Application No. 10/709,138  
Amendment dated October 22, 2007  
Reply to Office Action of July 20, 2007

5

Docket No.: 80300(302750)

The Examiner has maintained from the previous Office Action the 35 U.S.C. §103(a) rejection of claims 1, 3, 4, 7 and 10 as unpatentable over Lin et al. in view of APA, EP '623 and Miller; and the 35 U.S.C. §103(a) rejection of claims 9 and 11 as unpatentable over EP '623 in view of APA.

Applicant respectfully traverses this rejection.

On page 15 of the Office Action the Examiner states:

Applicant appears to be arguing that the references do not teach or suggest applying the oxidizing agent specifically in spaces measured between conductive electrodes that are less than 30 microns (or other predetermined dimensions) in order to prevent short circuits. However, this is not what is claimed. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Here all that is required is that the oxidizing agent is selectively coated in space portions that are smaller than 30 microns not that all such space portions are coated with the agent or that oxidizing agent only be applied in these portions. There is no indication as to the prevention of short circuits in the claims. Thus, applying the agent over some portions smaller than 30 microns reads on the claims as worded. Therefore, the suggestion of coating a protective material to provide masking (in this case the oxidizing agent) provided by the combination of references would be on an area that meets the claimed requirements. Moreover, as to the solder resist omission, this would be provided by the combination of references which provides the suggestion of using the oxidizing agent.

Accordingly, claim 1 has been amended to recite that the oxidizing agent is selectively coated in the space portions in which the distance between the electrodes is smaller than 30  $\mu\text{m}$  in order to prevent short circuits.

Furthermore, it should be noted that the phrase in amended claim 1 "oxidizing agent is selectively coated in a space portion in which the distance between the electrodes is smaller than 30  $\mu\text{m}$  in order to prevent short circuits, thereby, the step of forming a solder resist pattern on the space portion is omitted by forming the oxidizing agent" is not taught, mentioned or suggested by any of the cited references.

Thus, the 35 U.S.C. §103(a) rejections should be withdrawn.

Application No. 10/709,138  
Amendment dated October 22, 2007  
Reply to Office Action of July 20, 2007

6

Docket No.: 80300(302750)

In view of the aforementioned amendments and accompanying remarks, claims 1, 3, 4, 7 and 10, as amended, are in condition for allowance, which action, at an early date, is requested.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 04-1105.

Dated: October 22, 2007

Respectfully submitted,

By W. L. Brooks  
William L. Brooks

Registration No.: 34,129  
EDWARDS ANGELL PALMER & DODGE LLP  
1875 Eye Street, NW  
Washington, DC 20006  
(202) 478-7370  
Attorneys/Agents For Applicant